[illegible]

Figure 2

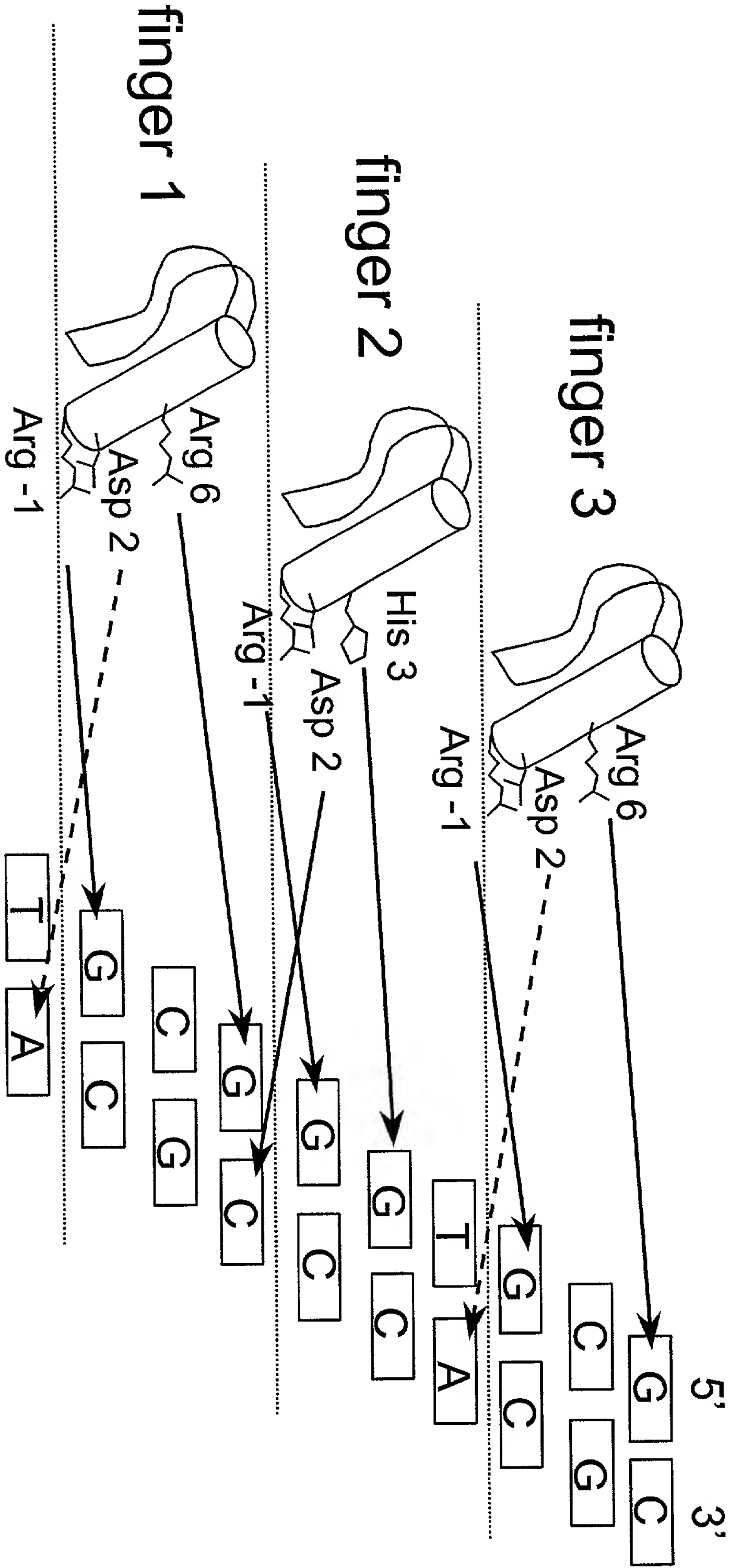


Figure 3

		Base			
		G	A	C	T
5'	Position in triplet	Arg6 Lys6 Asp2 Ser2	Gln6	Ser2	Lys6 Asp2
		His3 Lys3	Asn3 Ser3 His3	Asp3 Thr3 Val3 Leu3	Thr3 Ala3 Ser3 Val3
		Arg-1	Gln-1	Asp-1	Leu-1 Thr-1 Asn-1
		3'			

Figure 4

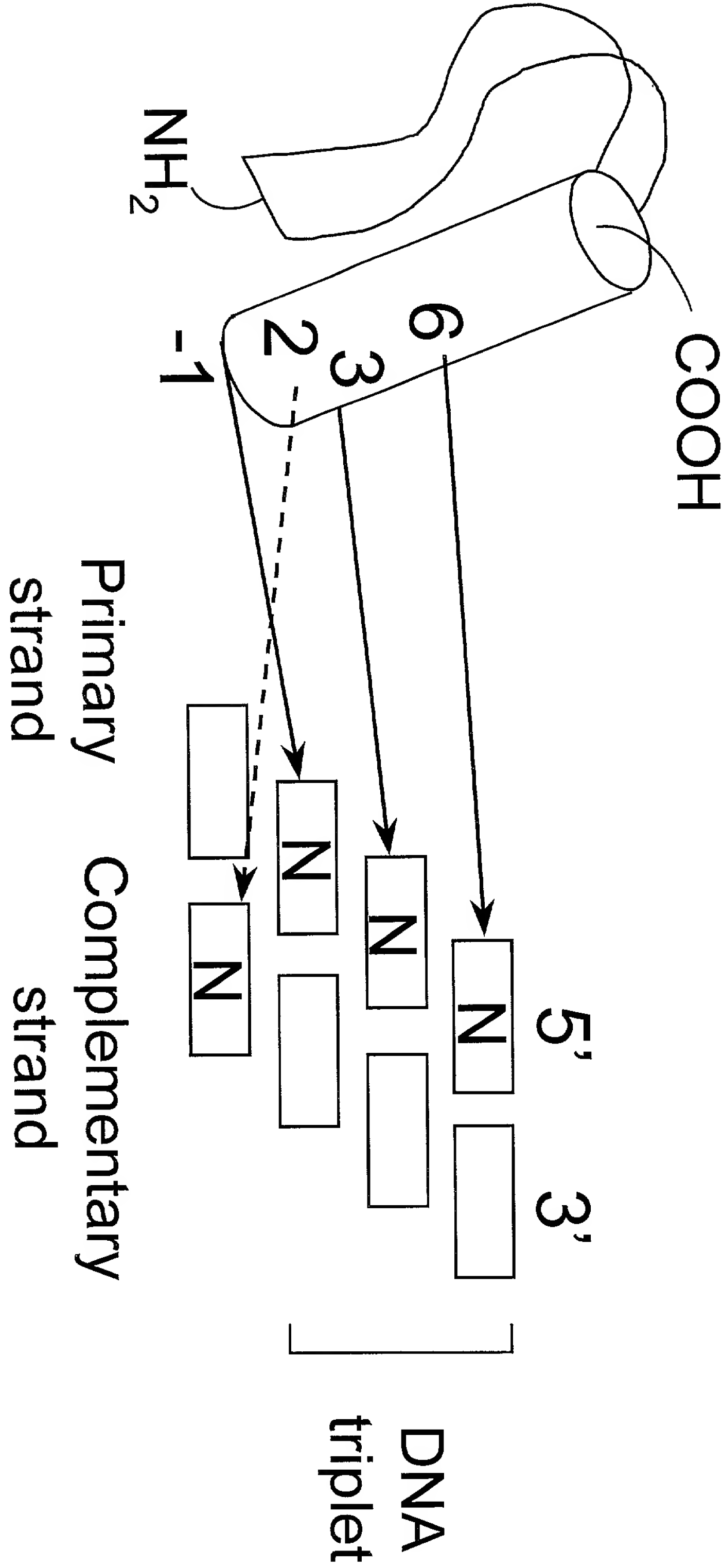
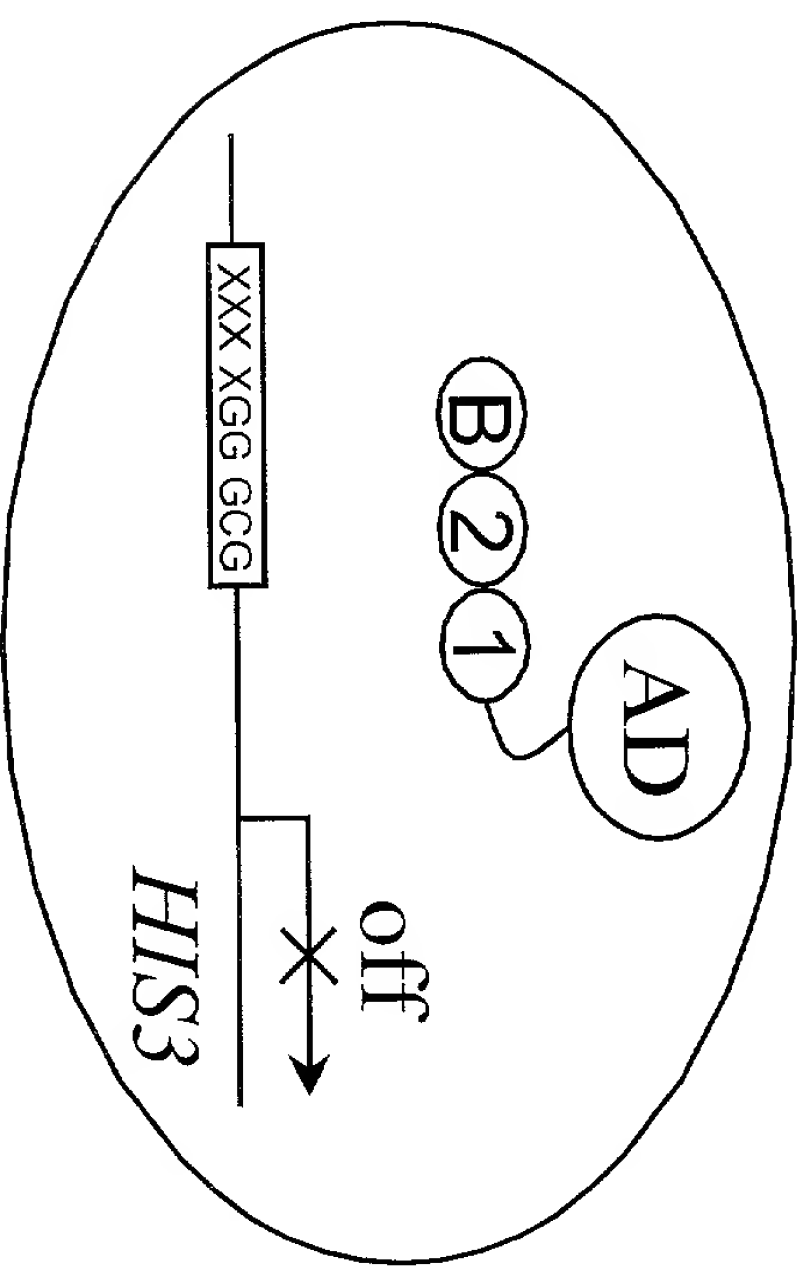
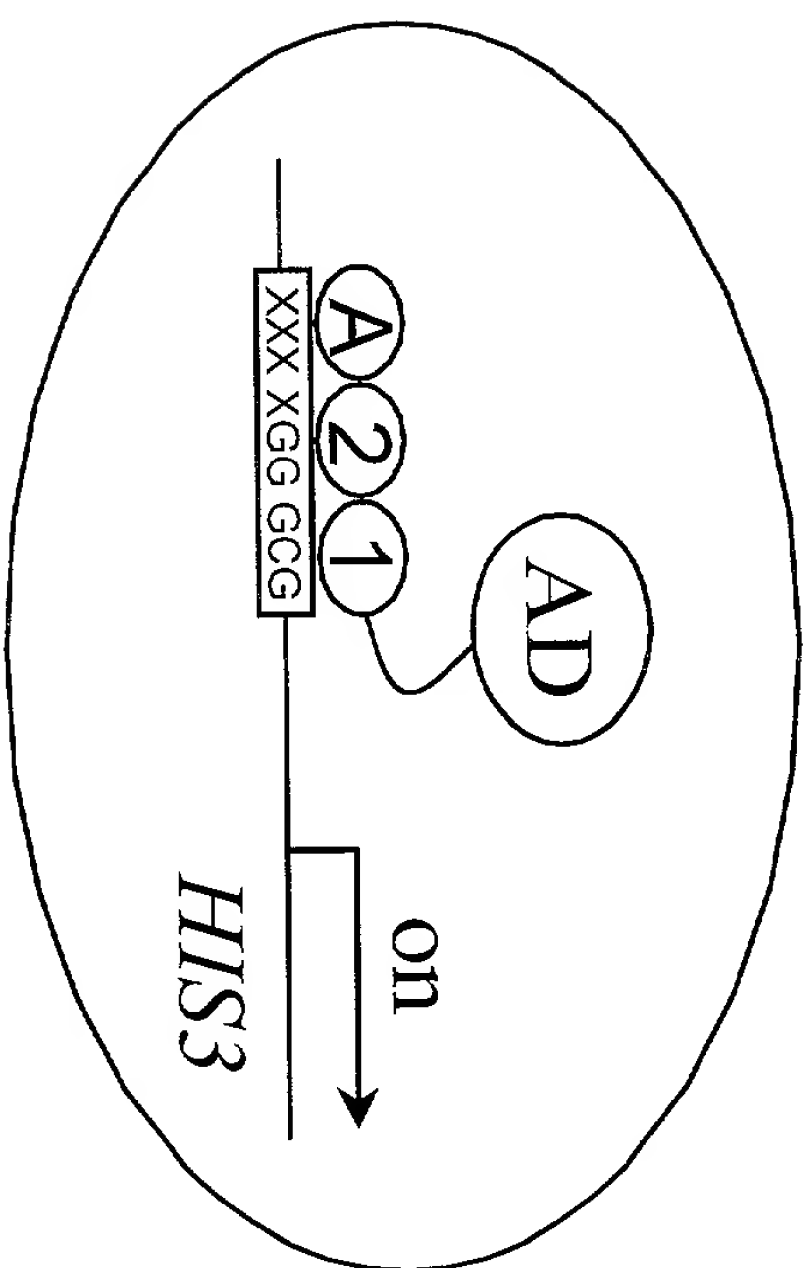


Figure 5



Growth on
– histidine plates

Yes

No

Figure 5 shows two cells. The left cell is growing on histidine plates, and the right cell is not growing on histidine plates. The left cell has an AD protein bound to a DNA sequence containing a histidine gene (HIS3). The AD protein is bound to a sequence labeled 'A21' (A, 2, 1) and the DNA sequence is labeled 'XXX XGG GCG'. An arrow labeled 'on' points to the HIS3 gene, indicating that the gene is expressed and the cell grows. The right cell has an AD protein bound to a DNA sequence containing a histidine gene (HIS3). The AD protein is bound to a sequence labeled 'B21' (B, 2, 1) and the DNA sequence is labeled 'XXX XGG GCG'. An arrow labeled 'off' points to the HIS3 gene, indicating that the gene is not expressed and the cell does not grow.

HIV-1 LTR (-124/-115):	5'-GAC ATC <u>GAG C</u> -3'	(SEQ ID NO:1)
HIV-1 LTR (-23/-14):	5'-GCA GCT <u>GCT T</u> -3'	(SEQ ID NO:2)
HIV-1 LTR (-95/-86):	5'-GCT GGG <u>GAC T</u> -3'	(SEQ ID NO:3)
Human CCR5 (-70/-79):	5'-AGG GTG <u>GAG T</u> -3'	(SEQ ID NO:4)
Human CCR5 (+7/+16):	5'-GCT GAG <u>ACA T</u> -3'	(SEQ ID NO:5)

HIV-1 LTR (-23/-14): 5'-GCA GCT GCT T-3' (SEQ ID NO:2)

HIV-1 LTR (-95/-86): 5'-GCT GGG GAC T-3' (SEQ ID NO:3)

Human CCR5 (-70/-79): 5'-AGG GTG GAG T-3' (SEQ ID NO:4)

Human CCR5 (+7/+16): 5'-GCT GAG ACAT-3' (SEQ ID NO:5)

Figure 7

GCGT (optimal Zif268-binding site)

5'-CCG GCGTGGGCG GCT GCGTGGGCG T GCGTGGGCG GACT GCGTGGGCG-3' (SEQ ID NO:6)
3'-GCACCCGC CGA CGCACCCGC A CGCACCCGC CTGA CGCACCCGC AGCT-5' (SEQ ID NO:7)

GAGC (HIV-1 LTR, -118/-115)

5'-CCGGC GAGCGGGCG GTC GAGCGGGCG T GAGCGGGCG GATC GAGCGGGCG-3' (SEQ ID NO:8)
3'-G CTCGCCCCG CAG CTCGCCCCG A CTCGCCCCG CTAG CTCGCCCCG AGCT-5' (SEQ ID NO:9)

GCTT (HIV-1 LTR, -17/-14)

5'-CCGGCT GCTTGGGCG GCT GCTTGGGCG T GCTTGGGCG GGCT GCTTGGGCG-3' (SEQ ID NO:10)
3'-GA CGAACCCGC CGA CGAACCCGC A CGAACCCGC CCGA CGAACCCGC AGCT-5' (SEQ ID NO:11)

GACT (HIV-1 LTR, -89/-86)

5'-CCG GACTGGGCG GGG GACTGGGCG T GACTGGGCG GAGG GACTGGGCG-3' (SEQ ID NO:12)
3'-TGACCCGC CCC CTGACCCGC A CTGACCCGC CTCC CTGACCCGC AGCT-5' (SEQ ID NO:13)

GAGT (Human CCR5, -76/-79)

5'-CCG GAGTGGGCG GTG GAGTGGGCG T GAGTGGGCG GATG GAGTGGGCG-3' (SEQ ID NO:14)
3'-TCACCCGC CAC CTCACCCGC A CTCACCCGC CTAC CTCACCCGC AGCT-5' (SEQ ID NO:15)

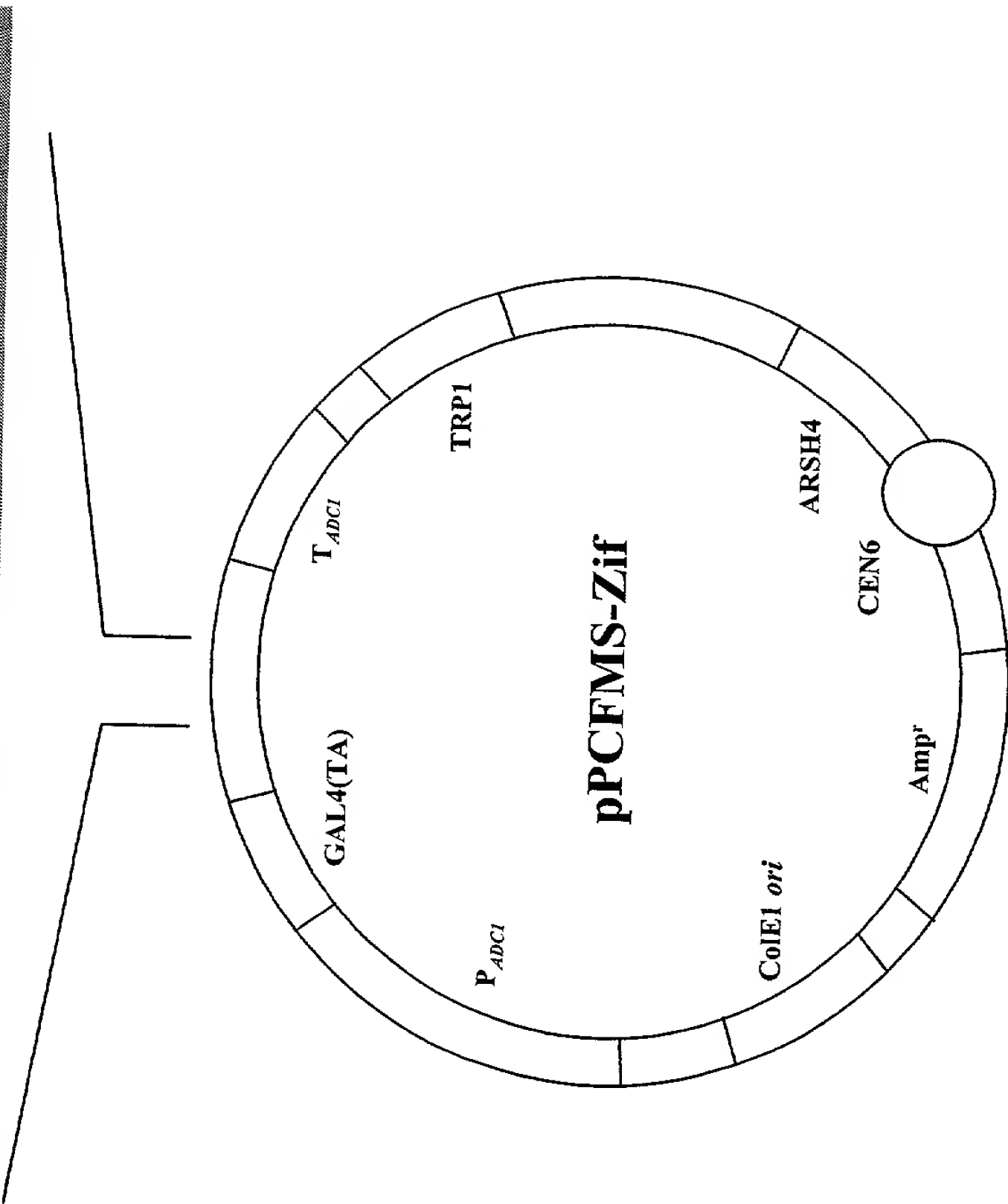
ACAT (Human CCR5, +13/+16)

5'-CCGG ACATGGGCG GAG ACATGGGCG T ACATGGGCG GAAG ACATGGGCG-3' (SEQ ID NO:16)
3'-TGTACCCGC CTC TGTACCCGC A TGTACCCGC CTTC TGTACCCGC AGCT-5' (SEQ ID NO:17)

Figure 8

1000 900 800 700 600 500 400 300 200 100 0

Lys	Glu	Gly	Gly	Ser	Thr	Phe	Arg	Thr	Gly	Gln	Glu	Arg	Pro	Zif268	Asp	Pro	Arg	Glu		
AAA	GAG	GGT	GGG	TCG	ACC	TTC	CGG	ACT	GGC	CAG	GAA	CGC	CCA	---	---	GAT	CCG	CGG	GAA	
Sall																			ECORI	
Phe Arg Ser Thr Ser Ala Ala Ala Lys Stop																			T _{ADCI}	
TTC	AGA	TCT	ACT	AGT	GCG	GCC	GCT	AAG	GTA	AGA	CGT	CGA	GCT	CGC	CAT	CGC	GGT	GGA	AGC	TTT
NotI																			SacI	



Zif268

	Finger 1	Finger 2	Finger 3	
BspEI/MscI	MscI	BspEI/SgrAI	SacII	

Figure 9

E R P Y A C P V E S C
GGG TCG ACC TTC CGG ACT GGC CAG GAA CGC CCA TAT GCT TGC CCT GTC GAG TCC TGC
SalI BspEI MscI

D R R F S R S D E L T R H I R I H T G
GAT CGC CGC TTT TCT CGC TCG GAT GAG CTT ACC CGC CAT ATC CGC ATC CAC ACT GGC
MscI

Q K P F Q C R I C M R N F S R S D H L
CAG AAG CCC TTC CAG TGT CGA ATC TGC ATG CGT AAC TTC AGT CGT AGT GAC CAC CTT

T T H I R T H T G E K P F A C D I C G
ACC ACC CAC ATC CGG ACC CAC ACC GGC GAG AAG CCT TTT GCC TGT GAC ATT TGT GGG
BspEI SgrAI

R K F A R S D E R K R H T K I H L R Q
AGG AAG TTT GCC AGG AGT GAT GAA CGC AAG AGG CAT ACC AAA ATC CAT TTA AGA CAG

K D (SEQ ID NO: 21)
AAG GAT CCG CGG GAA TCC (SEQ ID NO: 20)
SacII EcoRI

Figure 11

CSNR:

T G Q K P Y K C K Q C G K A F G C P S
ACC GGG CAG AAA CCG TAC AAA TGT AAG CAA TGT GGG AAA GCT TTT GGA TGT CCC TCA
-1 2
N L R R H G R T H T G E K P R (SEQ ID NO:23)
AAC CTT CGA AGG CAT GGA AGG ACT CAC ACC GGC GAG AAA CCG CGG (SEQ ID NO:22)
3 6

HSNK:

T G E K P Y K C K E C G K A F N H S S
ACC GGG GAG AAG CCA TAC AAG TGT AAG GAG TGT GGG AAA GCC TTC AAC CAC AGC TCC
-1 2
N F N K H H R I H T G E K P R (SEQ ID NO:25)
AAC TTC AAT AAA CAC CAC AGA ATC CAC ACC GGC GAA AAG CCG CGG (SEQ ID NO:24)
3 6

SSNR:

T G E R P F E C K E C G K A F S S G S
ACC GGG GAG AGG CCA TTT GAA TGT AAG GAA TGT GGG AAA GCC TTT AGT AGT GGT TCA
-1 2
N F T R H Q R I H T G E K P R (SEQ ID NO:27)
AAC TTC ACT CGA CAT CAG AGA ATT CAC ACC GGT GAA AAG CCG CGG (SEQ ID NO:26)
3 6

RDER:

T G Q K P Y V C D V E G C T W K F A R
ACC GGG CAG AAG CCA TAC GTA TGC GAT GTA GAG GGA TGT ACG TGG AAA TTT GCC CGC
-1
S D E L N R H K K R H T G E R P R (SEQ ID NO:29)
TCA GAT GAG CTC AAC AGA CAC AAG AAA AGG CAC ACC GGC GAA AGA CCG CGG (SEQ ID NO:28)
2 3 6

QSTV:

T G E R P Y E C N E C G K A F A Q N S
ACC GGG GAG AGA CCT TAC GAG TGT AAT GAA TGC GGG AAA GCT TTT GCC CAA AAT TCA
-1 2
T L R V H Q R I H T G E K P R (SEQ ID NO:31)
ACT CTC AGA GTA CAC CAG AGA ATT CAC ACC GGC GAA AAG CCG CGG (SEQ ID NO:30)
3 6

VSTR:

T G E R P Y E C N Y C G K T F S V S S
ACC GGG GAG AGG CCT TAT GAG TGT AAT TAC TGT GGA AAA ACC TTT AGT GTG AGC TCA
-1 2
T L I R H Q R I H T G E R P R (SEQ ID NO:33)
ACC CTT ATT AGA CAT CAG AGA ATC CAC ACC GGC GAG AGA CCG CGG (SEQ ID NO:32)
3 6